



# Respirator Prototyping Laboratory

**Description:** The Respirator Prototyping Laboratory is a 300 square foot research and development facility dedicated for the design and prototyping development of new respiratory protection products. It encompasses all the equipment necessary to take an idea for a respirator from concept to a concept model.

**Equipment:** The Respirator Prototyping Laboratory contains several state-of-the-art computer aided design systems, a laser digitizer, and a stereolithography machine for rapid prototyping of respirator concepts. The facility also includes a plastic injection molding machine and a computer numerical control (CNC) machine tool which are available to support concept development. This facility, combined with the rubber laboratory, provide a complete development facility for advanced respirator development.



## Products:

- Concept models of respiratory protection items for research, development, and testing.
- Process engineering studies, which result in improved product quality and/or cost savings.

## Facility Applications:

- Digitization of complex model surfaces.
- Computer design of complex three dimensional models.
- Stereolithography development of computer models.
- Novel material and process development of rubber and plastic products.



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For information on Technology Transfer applications, please contact us by E-mail ([technical.outreach@sbccom.apgea.army.mil](mailto:technical.outreach@sbccom.apgea.army.mil)) or by fax to 410-436-6529.